

## AMENDMENTS TO THE CLAIMS

1-30. (Cancelled)

31. (Currently Amended) A system comprising:

a bus;

a first host system coupled to the bus to control ~~executing~~ a first plurality of peripherals via the bus ~~applications via a first plurality of buses~~; and a second host system coupled to the bus to control ~~executing~~ a second plurality of peripherals via the bus ~~applications via a second plurality of buses, and the second host system coupled with the first host system via a communications link~~, wherein the first host system and the second host system each include a controller, the controller having a fault detection module coupled with fault detection hardware, the fault detection module to receive a notification from the fault detection hardware indicating a fault of either the first host system or the second host system, wherein when the fault occurs, the host system that failed suspends control of and disconnects from the bus, and the host system that is still active takes control of the plurality of peripheral devices coupled to the host that failed the plurality of applications corresponding to the host system that failed are executed via the plurality of buses of the host system that is still active, and a host control (HC) interface unit to generate control signals transmitted during startup and fail-over.

32. (Currently Amended) The system of claim 31, wherein the controller further comprises:

an interface to provide the controller with access to the first and second plurality of applications being executed on the first host system and the second host system;

a Peripheral Component Interconnect (PCI)-to-PCI (P2P) control module;

a power and reset control module; and

a clock control module to provide clock signals to the ~~bus first and second plurality of buses~~

33. (Currently Amended) The system of claim 31, wherein the ~~bus comprises first and second plurality of buses comprise a first and second plurality of a COMPACTPCI bus-buses~~.
34. (Previously Presented) The system of claim 31 to use a Redundant System Slot (RSS) architecture.
35. (Previously Presented) The system of claim 32, wherein the first host system and the second host system each include a plurality communication modules, and an Ethernet link coupled with the plurality of communication modules to maintain synchronization between the first host system and the second host system.
36. (Currently Amended) The system of claim 31, wherein ~~the first host system and the second host system each include a host control (HC) the HC-interface unit that is further to:~~  
receive control signals transmitted during startup and fail-over; and  
respond to control signals transmitted during startup and fail-over.

37. (Currently Amended) A method comprising:

~~executing controlling~~ a first plurality of ~~applications peripherals~~ on a first host system via a ~~bus~~ ~~first plurality of buses~~;

~~executing controlling~~ a second plurality of ~~applications peripherals~~ on a second host system via ~~the bus~~ ~~a second plurality of buses~~; and

receiving a notification from fault hardware indicating a fault of either the first host system or the second host system, wherein when the fault occurs, ~~the host system that failed suspends control of and disconnects from the bus, and the host system that is still active takes control of the plurality of peripheral devices coupled to the host that failed~~ ~~the plurality of applications corresponding to the host system that failed are executed via the plurality of buses of the host system that is still active~~; and generating control signals to be transmitted during startup and fail-over.

38. (Currently Amended) The method of claim 37, further comprising:

accessing the first and second plurality of ~~peripherals applications~~ being executed on the first host system and the second host system; and

providing clock signals to the ~~bus~~ ~~plurality of buses~~.

39. (Currently Amended) The method of claim 37, wherein ~~the bus comprises first and second plurality of buses comprise a first and second plurality of a COMPACTPCI bus buses~~.

40. (Previously Presented) The method of claim 38, further comprising maintaining synchronization between the first host system and the second host system via an Ethernet link.
41. (Currently Amended) The method of claim 37, further comprising: receiving ~~the~~ control signals to be used during startup and fail-over; and responding to the control signals received during startup and fail-over.

42-49. (Cancelled)